

IN THE CLAIMS:

1. (Currently Amended) A trip assembly for interrupting the flow of current upon the detection of excess current in a circuit breaker, the trip assembly comprising:
 - a trip bar including a trip finger having a tripped position and an ON position;
 - a stationary armature bracket including a base portion and a spring-support portion;
 - a movable armature including a first end coupled to said base portion of said armature bracket, ~~a spring tab~~, and a second end having a trip-actuating surface, said first end of said movable armature being coupled to said base portion of said armature bracket, said trip-actuating surface being disposed proximate said trip finger in the ON position and contacting said trip bar to initiate said tripped position, said second end further having a spring attachment means; and
 - a spring directly coupled at its respective ends to said spring-support portion of said armature bracket and to said spring ~~tab~~ attachment means of said movable armature;
 - and wherein said spring directly controls the current rating of said trip mechanism without additional adjustment mechanisms.
2. (Original) The trip assembly of claim 1, wherein said trip finger has a rolled contact edge.
3. (Original) The trip assembly of claim 1, further comprising a stationary yoke separated from said movable armature by a magnetic gap, said magnetic gap being kept constant for a plurality of circuit breaker ratings.
4. (Original) The trip assembly of claim 3, wherein said magnetic gap is between approximately 0.085 inches and approximately 0.095 inches.
5. (Original) The trip assembly of claim 4, said movable armature further including two yoke surfaces, each of said yoke surfaces being aligned with respective ones of the two armature surfaces of said stationary yoke.

6. (Currently Amended) The trip assembly of claim 1, wherein said spring is inclined at an angle α relative to a vertical axis of said armature bracket in either of said ON position or tripped position, said vertical axis being substantially perpendicular to said base portion of said armature bracket.
7. (Currently Amended) The trip assembly of claim 6, wherein said angle α is approximately 17 degrees.
8. (Original) The trip assembly of claim 1, wherein said trip finger is separated from said movable armature by a trip-bar gap, said trip-bar gap being kept constant for a plurality of circuit breaker ratings.
9. (Original) The trip assembly of claim 8, wherein said trip-bar gap is between approximately 0.040 inches and approximately 0.050 inches.
10. (Currently Amended) The trip assembly of claim 1, said armature bracket further including a stop tab for holding said movable armature in a default position, said stop tab being located proximate said spring tab attachment means of said movable armature.
11. (Original) The trip assembly of claim 1, said first end of said movable armature being rotatively connected to said base portion of said armature bracket.
12. (Original) The trip assembly of claim 1, said movable armature having a plurality of cutouts for reducing the mass of said movable armature.
13. (Original) The trip assembly of claim 1, wherein said spring is one of:
a first spring having a first-spring constant selected to cause a tripping action in a circuit breaker having a first current rating; and

a second spring having a second-spring constant selected to cause a tripping action in a circuit breaker having a second current rating.

14. (Currently Amended) A method of assembling trip-assembly components into a trip-assembly housing, comprising:

inserting an armature bracket into a trip-assembly housing, said armature bracket including a base portion and a spring-support portion;

operatively connecting a first end of a movable armature to said base portion of said armature bracket, said movable armature including a spring ~~tab~~ attachment means at a second end thereof opposite said first end, said second end thereof further having a trip-actuating surface;

directly coupling a first end of a spring to said spring-support portion of said armature bracket for exerting a direct force on said armature bracket; and

directly coupling a second end of said spring to said spring ~~tab~~ attachment means of said movable armature for exerting a direct force on said movable armature

whereby said spring directly controls the current rating of said trip mechanism without additional adjustment mechanisms.

15. (Currently Amended) The method of claim 14, further comprising positioning said spring at an angle α relative to a vertical axis of said armature bracket, said vertical axis being substantially perpendicular to said base portion of said armature bracket in either of a tripped on untripped position of the trip assembly.

16. (Original) The method of claim 15, wherein said angle α is approximately 17 degrees.

17. (Original) The method of claim 14, further comprising positioning said movable armature at a predetermined distance from a stationary yoke, said predetermined distance ranging from approximately 0.085 inches to approximately 0.095 inches.

18. (Original) The method of claim 14, further comprising positioning said movable armature at a predetermined distance from a trip finger of a trip bar, said predetermined distance being between approximately 0.040 inches and approximately 0.050 inches.

19. (Original) The method of claim 14, further comprising:
providing a stop tab in said armature bracket; and
supporting said movable armature in a default position with said stop tab of said
armature bracket.

20. (Original) The method of claim 14, further comprising:
selecting said spring to be a first spring having a first-spring constant for causing a
tripping action in a circuit breaker having a first current rating; or
selecting said spring to be a second spring having a second-spring constant for
causing a tripping action in a circuit breaker having a second current
rating.